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UNIVERSITY OF CALIFORNIA
RIVERSIDE

Examining the Mother Identity and Maternal Depression

A Thesis submitted in partial satisfaction
of the requirements for the degree of

Master of Arts

in

Sociology

by

Juha Lee

March 2019

Thesis Committee:

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ABSTRACT OF THE THESIS

Examining the Mother Identity and Maternal Depression

by

Juha Lee

Master of Arts, Graduate Program in Sociology
University of California, Riverside, March 2019
Dr. Jan E. Stetes, Chairperson

This study aims to examine whether maternal depression in mothers of young children are associated with identity processes. Using identity theory, it considers how an identity is processed between the self and others in situations so that situational meanings match the standards regarding the mother identity. Ordered logistic regression analyses of data gathered from the Early Head Start program in a southwestern town between December 2017 and January 2018 revealed two important findings about low-income mothers. First, consistent with identity theory, mothers reported higher depression when their mother identity was not verified by others. Second, contrary to identity theory, identity prominence and identity salience was positively associated with maternal depression. These contrary findings may be due to mothers not feeling that they are an adequate “financial provider.” This explanation is speculative and future research needs to examine this more closely.

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Building on the foundational components of symbolic interactionism such as Cooley's (1902) "looking glass self" and Mead's (1934) theory of the self, identity theorists examine the relationship between how we see ourselves (our identity standards), how we think others see us (reflected appraisals), and how identities influence behavior and emotions in social situations. An identity is a set of meanings as to who one is in a role, a group, and as a person (Burke and Stets 2009). For example, individuals have meanings that they apply to themselves when they are in the role of mother, father, student, and immigrant; when they are members of groups, such as a member of a graduate student labor union; and when they describe themselves as moral or controlling. Such meanings imply that individuals possess multiple identities (James 1890), and members of society share the meanings of these identities.

Since the self has multiple identities, it can be multilayered, which implies the presence of an identity is a number of identities within the self that are rank ordered based on the *importance* of the identity, and the *probability* of the identity being invoked. These are respectively known as an identity prominence hierarchy and identity salience hierarchy. There have been a number of studies on identity prominence and salience, but most focus on the student identity (Burke and Reitzes 1980). In this study, I test the effects of identity prominence and salience for a different role: the mother identity, and its potential consequence: maternal depression.

In addition to the above, identity theorists argue that when the self-view and the reflected appraisals match, an identity is verified, and the person experiences positive

emotions. In this study, I examine the verification process. I investigate whether the negative feeling of depression is the result of non-verification of the mother identity. In general, emotions are defined as feelings individuals experience in a particular situation. Emotions are categorized into primary and secondary emotions (Turner and Stets 2005). The primary emotions include happiness, fear, anger, and sadness; the secondary emotions are more intricate as they are a mixture of primary emotions. Because the consequence of identity verification is distinguished as either positive or negative feelings, identity theorists discuss emotions with respect to its valence rather than focusing on specific emotions. However, I focus on a specific feeling, that is, the secondary emotion of depression.

This study investigates the mother identity by assuming that new mothers assess their own feelings and symptoms of stress based on a new identity they gain through giving birth to a baby. Postpartum depression (PPD) is a well-known mental illness that new mothers experience as mothers fail to recover from feeling blue after the birth of the child. It is believed that PPD is largely due to hormonal changes that women experience by giving birth. This study, however, sets up a social psychological framework, arguing that depression may be understood within an identity perspective.

Scholars have not paid much attention to studying the relationship between the identity process and maternal depression. Maternal depression has been in relation to hormones or to heredity. An additional explanation for the occurrence of maternal depression is offered by using identity theory. In turn, the findings might advance identity

theory. The data that forms the basis of this study is from the Early Head Start program in a southwestern town.

Identity Theory

James' (1890) idea that we possess multiple identities led identity theorists to insist the presence of an identity hierarchy in terms of its prominence (McCall and Simmons 1978) and salience (Stryker 1980; Stryker and Serpe 1982). According to Stryker (1980) and McCall and Simmons (1978), identity prominence and salience are mutually exclusive. Later studies (Burke and Stets 2009; Stets and Biga 2003; Stets and Harrod 2004; Stryker and Serpe 1994) report how identity salience, prominence, and commitment are associated with identity performances. Individuals tend to enact behaviors relevant to an identity that is highly salient, prominent, and, one they are committed to. For McCall and Simmons (1978), identity performances are a result of actors attempting to interrelate their identities with those of others in a situation. Thus, performances associated with more prominent identities are more likely to be carried out. For Stryker (1980), identity performances or behavior is an indicator of how salient an identity is in one's overall hierarchy of identities. In terms of commitment, Stryker explains that the salience of an identity is a function of how committed one is to the identity.

Identity Prominence

By adopting the concept of multiple selves, McCall and Simmons (1978) highlight the relevance of identity prominence, which is an individual's subjective sense of the value of an identity relative to that of other identities (Ervin and Stryker 2001). As the prominence hierarchy reflects the individual's ideal self (McCall and Simmons 1987), identity prominence represents the importance of the identity to the individual more important identities should generate more positive emotions. When others challenge a prominent identity, an individual may experience negative emotions.

Aside, for many women, the above motherhood is a central feature of the female identity (Nicolson 1999). "Becoming a mother" usually implicates a change in a woman's life biologically as well as in how she sees herself. Being a mother causes women to lose or alter the way they define themselves as their ideals about motherhood as well as their understandings of who they are in relationship to others may change (Laney et al. 2013). Women are often expected to experience positive feelings about motherhood and to be the ideal mother that is portrayed by society (Hare-Mustin and Broderick 1979; Hays 1996). In Western society, it is believed that motherhood should bring fulfillment, contentment, and excitement, which would lead to overall happiness (Mauthner 2002). Therefore, the cultural representations of motherhood reinforce the dominant myth that women are natural mothers and becoming a sacrificial and caring mother is worthwhile since it brings joy.

Mauthner (2002) found that the dominant myth about motherhood makes mothers hide their vulnerabilities and difficulties experienced as mothers to avoid being perceived as a “bad” mother. Choi and colleagues (2005) found that women who perceive themselves as failing to meet the “good” mother criteria work harder to be the ideal mother. Because women value their role as mothers and are willing to be part of the “good” mother criteria, they may report less depression as the mother identity becomes more prominent. Based on these considerations and the idea that a prominent identity should generate positive emotions, I offer the following hypothesis regarding mothers:

H1: The more prominent the mother identity is to a mother, the less likely she will be depressed.

Identity Salience

Identity salience is the probability of an identity being invoked in a situation. Identities ranked higher in the salience hierarchy are more likely to be enacted than those ranked lower in the salience hierarchy (Stryker 1980). With respect to emotions, Stryker (1980) argues that identities that generate positive emotions are more likely to be invoked more frequently and placed higher in the salience hierarchy, while identities generating negative emotions will be lower in the hierarchy. He also indicates that the strength of the emotional response to identity-related behaviors reflects the relative importance of the identity in the salience hierarchy. For example, a wife who experiences happiness may have her identity as a wife as high in her salience hierarchy. On the other hand, when negative feelings are experienced, individuals may employ coping behaviors to help

reassert their identities (Ellestad and Stets 1998) so that the negative feelings are circumvented. McCall and Simmons (1978) argue that if support for an identity is less than expected from an important audience, they may choose to play out another identity that may receive stronger support.

The strong taboo against mothers admitting to having difficulties leads women to conceal their true feelings by feigning an appearance of strength and coping (Mauthner 2002). Even though the way mothers behave might not be sincere or voluntary, because they are meeting a “good” mother criteria, mothers would experience positive feelings. As they invoke the mother identity (e.g., by showing others pictures of their children and talking about them), they might believe that they are caring and loving toward their children. These conjectures as well as the idea that a salient identity generate positive emotions motivate my second hypothesis.

H2: Mother identity salience is negatively associated with depression.

Identity theorists examine whether identity prominence influences identity salience or *vice versa* (Stets 2006). McCall and Simmons (1978) as well as Burke and Stets (2009) address the relationship of prominence and salience, although a lack of longitudinal work prevents more rigorous studies as to the relationship between prominence and salience. Nuttbrock and Freudinger (1991) and Brenner (2011, 2012) support a causal ordering of the two arguing that identity prominence influences identity’s salience in a situation. Brenner, Serpe, and Stryker (2014) also concluded that prominence causes salience in a longitudinal study, yet they argued that the direction and

magnitude of the association between the two may vary for different identities. The present study is cross-sectional; therefore, it does not examine the relationship between the two. It only focuses on the role of identity prominence and salience in the identity process.

Identity Verification

As defined earlier, identities are shared social meanings that individuals attribute to themselves in a role (e.g. student or mother), a social group (e.g. ethnic group or volunteer group), and as a person (e.g. moral or controlling). Through social interactions, individuals strive to verify the identity meanings they hold. According to Burke (1991), identity theory posits that identities operate as a cybernetic control system. The process is similar to how a thermostat functions. A thermostat works by comparing the current temperature to a desired temperature; it cues the furnace or the air conditioner to match the current temperature to the set temperature. Similarly, the identity process, which is composed of four components - the identity standard (identity meanings or how people see themselves), input (reflected appraisals or how people think others see them), a comparator (a comparison between reflected appraisals and the way people see themselves), and output (behavior) (Burke and Stets 2009) aims to accomplish identity verification.

When reflected appraisals align with one's identity standard, an identity is verified, and the individual will experience positive emotions, while the failure of verification will induce negative emotions (Burke and Stets 1999). When individuals fail

to verify an identity, they are motivated to change their behavior to reduce the identity discrepancy. For example, if a wife believed that she was a devoted wife, but received feedback from her husband indicating she was not so devoted, her identity would fail to be verified, and she would feel bad. These negative emotions would motivate her to change her behavior in order to get her identity verified. Changing her behavior, such as spending more time with her husband might demonstrate to her husband that she was a devoted wife. If she received feedback from her husband, based on this changed behavior, indicating that he then viewed her in a way that she viewed herself, her identity would be verified, and she would feel good.

The relationship between emotions and identity verification has support from a variety of identities, including the worker identity (Stets 2003), the student identity (Burke and Reitzes 1980), the spouse identity (Stets and Burke 2005), and the moral identity (Stets and Carter 2011). While some studies have focused on the parent identity (Cast 2009; Simon 1992) none have specifically examined the mother identity.

When people are unable to verify their identities by keeping perceptions of their self-relevant meanings in situations close to their identity standard, they experience negative emotions (Burke 1991). In studying depression, identity theory is a sound framework for explaining the negative emotional outcomes that mothers experience as there may be difficulty verifying their new identity in situations. Therefore, I conjecture:

H3: A discrepancy in the mother identity is positively associated with maternal depression.

The Present Study

Through testing these hypotheses about the role of identity prominence, salience, and verification, the present study aims to contribute to understanding how the mother identity influences emotions, particularly depression. Because being a mother is one of the most important, yet burdensome events for many women, mothers may experience identity disapproval or deprecation that may bring depression. I examine identity prominence and salience across these mothers who hold the mother identity as one of the many identities that women may hold. What I also think is important to examine is the degree to what this identity is verified. The literature on the mother identity and maternal depression is underdeveloped in sociology. Hence, closer attention is warranted to examining mothers' experiences.

Method

Sample

This study is based on a survey (see A1 in the appendix) of mothers from an Early Head Start program in a southwestern town. The Early Head Start program is an early education program that serves pregnant mothers and newborns through age 3. The program intends to provide services for those children in low-income families and to increase awareness among future parents, particularly pregnant women. The program strives to educate parents so that these children from low-income families may succeed.

The survey was distributed via Early Head Start program between December of 2017 and January of 2018. Mothers with infants from 3 months to 36 months were eligible. Mothers with 3 month old infants were excluded because their status might make them unable to commit to a survey due to physical and mental exhaustion. The survey asked mothers to report on the meanings of the mother identity, how they thought others saw them in the mother identity (their reflected appraisals), how they were feeling (sadness, depression, anger, fear, happiness, and pride), how important and salient the mother identity was to them, how much they experience depression, and finally they reported on their background (race, age, education, etc.)

A total of 100 mothers from the Early Head Start program completed a survey, and a \$5 gift card was provided as compensation. The survey was offered to about 124 mothers, but only 100 mothers completed the survey. The age of these mothers ranged from 22 to 44 years, and some were new mothers while others had a child under three years of age. Since their enrollment in this program categorized them as low in income, the survey did not ask about household income. The majority of the mothers does not work and are married. Approximately 70% of the mothers were Latinos. Their frequency of attending religious the services was high.

Dependent Variable

Depression was measured using the PHQ-9 Patient Depression Questionnaire, a scale of nine items (Martin, Rief, Klaiberg, and Braehler 2006). Mothers were asked to report how often they were bothered by the following problems over the past 2 weeks:

“Little interest or pleasure in doing things,” “Feeling down, depressed or hopeless,” “Trouble falling asleep, staying asleep, or sleeping too much,” “Feeling tired or having little energy,” “Poor appetite or overeating,” “Feeling bad about yourself,” “Trouble concentrating on things, such as reading the newspaper or watching television,” “Moving or speaking so slowly that other people could have noticed,” or alternatively, “Being so fidgety or restless that you have been moving around a lot more than usual,” and “Thoughts that you would be better off dead or of hurting yourself in some way.”

Each item was measured on a scale from 1-4, where 1 = not at all, 2 = several days, 3 = more than half the days, and 4 = nearly every day. Following PHQ-9’s scoring procedures, the scores were summed with 0 = no depression; 1-4 = minimal depression; 5-9 = mild depression; 10-14 = moderate depression; 15-19 = moderately severe depression and 20-27 = severe depression. Then, I recoded each category, for example, 0 as no depression, 1 as minimal depression, 2 as mild depression, and 3 as moderate depression. Therefore, the dependent variable is an ordinal variable in this study. I ran a factor analysis with promax rotation to assess the underlying relationships between the items. The solution identified one factor that reflected depression. The results are presented in A2 in the appendix. The single factor has an alpha of .89.

Independent Variables

Mothers were asked to report how they currently were feeling. As mentioned earlier, four primary emotions (happy, sad, angry, and fearful) and three secondary emotions (depressed, guilty, and proud) were measured. Each emotion was measured on a

scale from 1-9 indicating how intensely the individual was experiencing the feeling with 1 reflecting no intensity and 9 reflecting strong intensity. A factor analysis indicated that the items loaded onto a single dimension and Cronbach's alpha indicated relatively high reliability (.75). Happiness and pride items were reverse-coded, and then the items were summed with a higher value indicating positive emotions and a lower value indicating negative emotions. The results are provided in A3 in the appendix.

For the mother identity, seven descriptions were provided as to the meaning of being a mother including "selfish," "forgiving," "involved with child(ren)," "physically strong," "mentally weak," "moral," and "financial provider." Because studies on mother identity are difficult to find, these descriptions are based on my review of the literature on motherhood and mothering for the years 1994 (Glenn and Forcey 1994) to 2007 (O'Reilly 2007). It mostly was based off of a motherhood literature (Glenn and Forcey 1994; O'Reilly 2007) that compiled a myriad of motherhood related articles. Research on motherhood suggest that these descriptions represent the general meanings of being a mother. Each item consisted of a pair of contradictory characteristics, therefore, mothers could not be both at the same time. Responses were coded from 1 (negative) to 7 (positive). A factor analysis revealed a single dimension of the mother identity. The forgiving, involvement with child(ren), physical strength, morality, and financial provider items were reverse-coded, and then the items were averaged to create a scale ranging from 1 to 7, with a higher value indicating a stronger identity and a lower value indicating a weaker mother identity (alpha reliability = 0.76). The items have relatively

high factor loadings with a high reliability. The results are presented in A4 in the appendix.

Identity Prominence

For measuring identity prominence, I asked mothers to report how much they agreed with the following four statements: (1) “Being a mother is an important part of how I see myself,” (2) “Being a mother is an important reflection of who I am,” (3) “I have come to think of myself as a mother,” and (4) “I have a strong sense of belonging to a community of mothers” (Stets and Biga 2003). Each item was measured on a scale from 1 to 4, where 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree. The items were summed to create a scale with a higher value indicating higher prominence and a lower value indicating lower prominence. There was only one factor corresponding to the prominence of the mother identity with a high reliability among the items (Cronbach’s $\alpha = 0.87$). The results are provided in A5 in the appendix.

Identity Salience

To measure identity salience, mothers were asked how often they identified themselves as mothers in different situations: meeting (1) “a person of the same sex,” (2) “a friend of a close friend,” (3) “a friend of a family member,” and (4) “a stranger” (Stets and Biga 2003; Stets, Carter, Harrod, Cerven, and Abruytn 2008; Stryker and Serpe 1994). Each item was measured on a scale from 1 to 4, where 1 = almost certainly would not, 2 = probably would not, 3 = probably would, and 4 = almost certainly would. The items were summed to create a scale with a high value indicating higher salience and a

low value indicating lower salience. The items factored into a single underlying dimension with a high reliability (Cronbach's $\alpha = 0.91$). The results are provided in A6 in the appendix.

Reflected Appraisals

To measure reflected appraisals of the mother identity, respondents were asked to report how much others who were close to them saw them as a mother in the following way: "selfish," "forgiving," "involved with child(ren)," "physically strong," "mentally weak," "moral," and "financial provider." The items factored into a single underlying dimension with a high reliability (Cronbach's $\alpha = 0.80$). The forgiving, involvement with child(ren), physical strength, morality, and financial provider items were reverse-coded, and then the items were averaged to create a scale ranging from 1 to 7 where 1 reflected a lower intensity and 7 reflected a higher intensity. The results are presented in A7 in the appendix.

Identity Discrepancy

I measured identity discrepancy by taking the difference between the scores on the mother identity items and reflected appraisals of the mother identity items: $(\text{Reflected appraisals} - \text{the Mother Identity})^2$. The result was squared to request the idea that a score in either a positive or negative direction is distressful. This formula has been used in prior studies (Stets and Harrod 2004; Stets, Carter, and Fletcher 2008). High scores indicate high levels of discrepancy.

Background Characteristics

Questions regarding employment, race, marital status, and frequency of attendance at religious service were asked of the mothers. Employment was a dichotomous variable (0 = unemployed, 1 = employed). The race/ethnicity variable was coded 1 for Latino and 0 for all others. Marital status was coded 0 and 1 to reflect not married and married, respectively. To measure frequency of attendance at religious service, mothers were asked to report how often they attend religious service: “never,” “less than once a year,” “about once a year,” “several times a year,” “about once a month,” “2-3- times a month,” “nearly every week,” and “several times a week.” A higher value on religious attendance represented more frequent attendance.

Analysis

In order to test the hypotheses and explore the relationships between depression and these variables, an ordered logistic regression was conducted. An ordered logistic regression is relevant for this model as the dependent variable is an ordinal variable. With an ordered logistic regression, I need to test the proportional odds assumption or the parallel regression assumption and make sure that the model has not violated the proportional odds assumption. The proportional odds assumption is that the effect of an independent variable on the ordinal dependent variable is uniform over all levels of the dependent variable. The violation of the proportional odds assumption allows a one-unit increase in an independent variable has the same effect on the dependent variable

regardless of category. Therefore, by running a generalized ordered logistic model, I confirmed that the model does not violate the proportional odds assumption.

Results

Ninety six percent of the mothers are biological mothers, and about 50% of them are the mother of two children. As mentioned previously, the youngest child was 2 months old while the oldest was 36 months old. Thirty five percent of them received some college education but no degree was obtained, and 27% of them have high school or equivalent degree. Only 19% of them work full-time while, more than 50% of mothers are not employed. The population is composed of largely Latino (66%), Whites (12%), Asian (10%), and African American (7%). Sixty-three percent of these mothers are married, 21% single, never married, and 5% are in a domestic partnership. The frequency of religious service attendance varies. Twenty six percent never attend religious services, while the remaining attend religious services at least once a year.

As shown in table 1, respondents reported a strong mother identity ($\bar{x} = 5.37$, $SD = 1.25$, on a scale of one to seven). Specifically, they viewed themselves as not selfish ($\bar{x} = 5.58$); forgiving ($\bar{x} = 5.05$); highly involved with their child(ren) ($\bar{x} = 6.00$); and possessing a high level of morality ($\bar{x} = 5.82$). In terms of strength, they viewed themselves as physically ($\bar{x} = 5.36$) and mentally strong ($\bar{x} = 5.78$). These mothers rated themselves low on being a financial provider ($\bar{x} = 4.34$).

(Table 1 about here)

Respondents reported strong emotions going into the survey ($\bar{x} = 7.49$, $SD = 1.57$), although the level of depression is not very high and is in the mild depression range ($\bar{x} = 1.07$, $SD = .85$). This level of depression may be detected from other people but is not likely to be severe enough to receive treatment. The degree of variation in depression reveals that while the average level of depression is slightly lower than what the average population reports, some of the mothers may suffer from higher than normal depression.

The scores for both identity prominence and salience are high ($\bar{x} = 3.50$ and 3.56 , respectively, on a scale ranging from 1 to 4), indicating that respondents see the mother identity as important to them and one that they routinely play out in situations. The self-view of these mothers and their perception of how others see them does not appear to be largely different. The identity discrepancy is very low ($\bar{x} = 1.09$ on the scale ranging from 0 to 19.61).

Table 2 presents the correlation among the variables in the study. The mother identity and depression are negatively correlated ($r = -.52$, $p \leq .05$). The emotions also are negatively associated with depression ($r = -.36$, $p \leq .05$), while salience ($r = .34$, $p \leq .05$) and prominence ($r = .27$, $p \leq .05$) are positively associated with depression. Those who report more positive emotions report a stronger mother identity ($r = .44$, $p \leq .05$) and more prominent mother identity ($r = .23$, $p \leq .05$). The mother identity is negatively correlated with discrepancy ($r = -.41$, $p \leq .05$) but is not significantly correlated with

salience or prominence. Identity salience and identity prominence are positive correlated ($r = .44, p \leq .05$).

(Table 2 about here)

Finally, in order to test the hypotheses and explore the relationships between depression and the other variables, an ordered logit regression analysis was conducted. The results of the ordered logit regression odds ratios are provided in Table 3.

(Table 3 about here)

The model tests the effects of emotions, the strength of the mother identity, identity prominence, identity salience, identity discrepancy, and the background variables on maternal depression. For a one unit increase in identity prominence, the odds of a high level of depression versus a low level of depression is 7.25 times greater when all of the other variables in the model are held constant. Because of the proportional odds assumption, the same increase, 7.25 times, is found between low depression and the combined categories of middle and high depression level. The relationship between identity prominence and maternal depression is not in the predicted direction therefore H1 is not supported.

Hypothesis 2 concerns the effect of identity salience on maternal depression. Theoretically, higher salience should lead mothers to experience less depression. The result, however, is not in the predicted direction as the odds ratio between identity salience and maternal depression is greater than 1. Empirically, for a one unit increase in identity salience, the odds of high level of depression versus a low level of depression is

4.26 times greater when that all of the other variables in the model are held constant.

Therefore, the empirical result does not support H2.

Lastly, for identity discrepancy, the odds of a high depression level versus the combined levels are 1.30. The same increase is found between a low level of depression and the combined levels of middle and high depression. The result supports H3 as higher identity discrepancy leads to high depression.

Other results of the odds ratio show that the stronger the mother identity, the less depressed they are. For a one unit increase in the mother identity, the odds of a high level of depression versus all the other lower levels of depression are .40 times greater. The same increase is found between a low level of depression and the combined high and middle levels of depression. Also, for a one unit increase in emotions, the odds of a high level of depression versus all the other lower levels of depression are .51 times greater. The same increase is found between low level of depression and the combined high and middle levels of depression. Among the background factors, race dummy variable is the only significant factor having the odds ratio as .25.

Discussion

This study provides an initial step toward developing a model that incorporates identity theory and maternal depression. Research on maternal depression has been largely explained as a result of biological and hormonal issues, yet some scholars (McIntosh 1993; Orr 1980) argue that PPD can be attributable to psychosocial factors.

This study perceives this matter in a social psychological perspective, suggesting how one's identity may have an impact on maternal depression. Previously, scholars studied psychological distress including anxiety and depression in relation to identity discrepancies (Marcussen 2006; Thoits 1991) showing how identity discrepancies are positively associated with distress. I examined the identity factors that might be related to maternal depression.

I examined different aspects of the identity process as it relates to maternal depression. As has been discussed previously, when an identity is activated, identity processes operate to maintain congruency between the identity standard and perceptions of identity-relevant meanings in this situation, including how individuals think others see them, which is the reflected appraisals. This verification process is one of the prime generators of emotions. Role identity verification, a match between reflected appraisals meanings and one's identity standard leads one to experience positive feelings. Burke (1996) addressed the role of emotion in identity theory, claiming that the failure of verification leads to distress. Understanding the role of emotion in identity theory in more detail, Burke and Harrod (2005) confirmed the impact of identity verification on several emotions including depression, anger, and general distress.

In this study, I attempted to expand the scope of the study of emotions in identity theory by examining how depression was related to different identity processes for mothers. Consistent with identity theory, I found that maternal depression was the result

of a mismatch between the mother identity and the reflected appraisals. When their mother identity was not verified by others, it was associated with maternal depression.

According to the model, identity prominence and maternal depression are positively associated. In theory, when the mother identity is valued highly, mothers should feel less depressed. I found that a highly valued mother identity was associated with an increase in depression. I also found that identity salience and maternal depression were positively associated. Theoretically, the higher the identity in the salience hierarchy, the more positive the individuals should feel. Stryker (1980) argues that identities that generate positive affect should be played out more often and move up in the salient hierarchy, while identities that repeatedly cause negative affect should be less likely to be played out and move down in the salience hierarchy. For example, when behavior associated with mothering consistently produces positive feelings, the mother identity should be high in the salience hierarchy.

These mothers are from low-income households, which potentially expose them to economic stress. For example, they might not be able to afford to buy toys or books for their children. This study does not include relevant questions on economic capital. One measure that may imply economic capital is the meaning of a mother as a “financial provider.” Because this study examines the consequence of identity discrepancy (non-verification), I tested the discrepancy that mother experience in regards to the description, “financial provider”.

To measure identity discrepancy of a “financial provider,” scores from reflected appraisals of the meaning of a mother as a “financial provider” and scores from the meaning of a mother as a “financial provider” were selected. By subtracting the two, I derived the difference between how mothers see themselves as financial providers and how mothers think others see them as financial providers. Then, I took a square of the value so that the higher the value equals a greater discrepancy between the mother’s mother identity standard in “financial provider” item and perceptions of how mothers think others see them as “financial provider.” I found that a greater discrepancy in “financial provider” ($OR = 1.06, p \leq .05$) meaning and maternal depression are positively associated. Other descriptions¹ provided as to the meaning of being a mother are not as significant as “financial provider,” indicating that these mothers are sensitive to the way people see them as financial providers. This finding may be unique to lower income mothers.

This may, in fact, explain the positive associations between identity prominence and identity salience and maternal depression. The result on identity prominence and maternal depression indicate that even though these mothers value their mother identity, if they think that others do not see them as economically self-sufficient or financially stable, they may feel depressed. Also, the result on identity salience and maternal depression shows that even if these mothers invoke their mother identity often, a large

¹ One other mother identity standard meaning contributes to an increase in depression when the identity discrepancy is high. This is the mother identity meaning of being “physically strong” ($OR = 1.06, p \leq .05$).

identity discrepancy in the “financial provider” category could leave mothers feeling depressed. The results suggest that they are highly sensitive of how others see them, particularly in terms of how capable they are as financial providers.

Because identity prominence reflects what these women value, these mothers live up to what they have set for themselves so that they may be called *good* mothers.

However, the mother image and life as a mother they anticipated may not coincide with reality as they see it because of their lack of economic and social capital. Thus, personal circumstances may play an important role in determining whether what they value can come true in reality. A disjunction between the two may leave them feeling depressed.

This explanation is speculative and would need to be tested, empirically.

As an alternative to economic capital, some studies on motherhood, find that the dominant myth created by the cultural representations of motherhood constrains mothers (Mauthner 2002; Choi et al. 2005). The acceptance of socially constructed ideals results in feelings of loneliness and isolation for mothers (Mauthner 2002). Because mothers are striving to become who society and culture urges them to be, even when they invoke their identity often, they may feel depressed. Mothers may be invoking their identities so that they do not get criticized by others. Because people expect certain behaviors from mothers such as talking about their children, when mothers fail to do so, people might judge them as “bad” mothers. This does not mean that all mothers are forcibly invoking their identities to please others, but we should consider such social pressures.

I found that Hispanics suffer less depression than other ethnic groups such as African-American, Asian, Caucasian, and other. This ethnic-racial explanation could be limited to the Early Head Start Program because the program consists of a large Hispanic population. Belonging to a group that is similar to themselves may help these mothers feel less depressed as they are receiving community support².

Limitations and Strengths

This study addresses a model that uses identity theory to explain maternal depression, showing how identity processes may have an impact on maternal depression. However, the current study carries a number of empirical limitations that need to be further tested and examined. First, the number of respondents is rather small to make generalizations. A study with a larger sample would be able to explore interaction effects between identity prominence, salience and discrepancy. To the extent that a prominent identity is verified, it could reduce depression. The same could apply to a salient identity. These effect were explored in this study and the interactions were not significant. This may have been due to a small sample. Future research might want to test this with a larger sample. Nevertheless, the findings from this study are still relevant as the results allows us to understand how one's identity may be related to depression among

² The result indicates that the effect of identity discrepancy on ethnic groups can be varied. Therefore, I ran an interaction effect of race and identity discrepancy, and it turned out to be not significant indicating that the level of identity discrepancy is equal for every race.

individuals at an Early Head Start Program. Even though it is difficult to generalize this study may pave the way for additional research.

Second, the findings apply to a certain group, thus we should be careful not to apply them to other populations. Furthermore, the survey should include more questions that take into account other stresses that mothers are experiencing other than economic hardships. They may be experiencing social or cultural hardships that may hinder them from feeling good though they love being mothers. For example, an immigrant mother who is struggling with cultural differences between her new and former country of residence may experience depression even if she values the mother identity and often invokes the mother identity. Or, the lack of social capital could isolate these mothers as they are living in very remote parts of the city.

Third and finally, the study is cross-sectional, thus longitudinal research is needed to assess a possible causal relationship between the identity process and maternal depression. The current study can only provide results that are conditional.

Conclusion

This study advances identity theory by investigating the nature and operation of the mother identity. It suggests how identity prominence and salience play a part in maternal depression. It also shows how identity non-verification is related to maternal depression. Thus, I have provided scholars studying maternal depression with a possible theoretical framework to consider. Even though the study carries some limitations. The

study still is valuable as it suggests that we need to consider linking identity theory with psychological distress.

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Tables

Table 1. Means, Standard Deviations, and Range of Variables (N = 86)

Variables	Mean	Standard Deviation	Minimum	Maximum
Depression	1.07	.85	0	3
Baseline Emotions	7.48	1.57	3	9
Mother Identity	5.37	1.25	1.29	7
Identity Salience	3.50	.70	1	4
Identity Prominence	3.56	.60	1.25	4
Identity Discrepancy	1.09	2.41	0	19.61
Employment	.48	.50	0	1
Marital Status	.01	.11	0	1
Race	.65	.48	0	1
Religious attendance	2.41	1.17	1	4

Table 2. Correlations Among the Variables (N = 86)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. Depression	1.00									
2. Baseline Emotions	-.36*	1.00								
3. Mother Identity	-.52*	.44*	1.00							
4. Salience	.34*	.16	.03	1.00						
5. Prominence	.27*	.23*	.18	.44*	1.00					
6. Discrepancy	.16	-.01	-.41*	-.15	-.13	1.00				
7. Employment	-.08	.04	.00	.11	-.10	.04	1.00			
8. Marital Status	-.01	.02	-.06	.08	.03	.19	.11	1.00		
9. Race	-.03	-.14	-.09	.04	-.07	.16	.11	-.15	1.00	
10. Religious attendance	.01	.09	-.07	-.02	.10	.10	-.05	-.04	-.23*	1.00

* $p \leq .05$

Table 3. Odds Ratio for Maternal Depression (N=86)

Independent variables	Maternal Depression
	OR (Standard Error)
Prominence	7.25** (5.04)
Salience	4.26** (2.19)
Discrepancy	1.30** (.14)
Mother Identity	0.40** (.11)
Baseline Emotions	0.51** (.11)
Employment	1.06 (.54)
Marital Status	0.03 (.09)
Race	0.25** (.15)
Religious Attendance	0.88 (.20)
R ²	.34**

* $p \leq .05$, ** $p \leq .01$

Appendix

A1. “Examining the Mother Role” Survey

Examining the Mother Role

Researcher: Juha Lee

Contact: 714-309-7757

UC Riverside Informed Consent

This is a survey for a research study about your role as a mother for women with an infant from birth to 3 years old. If you complete this web survey, you will be compensated for your time. You will receive a \$5 Target gift card. No compensation will be provided for partial completion. If you have any questions, you may ask the researcher as well as the director of the Early Head Start Program at any time. Your participation is completely voluntary, and you are free to withdraw from the study at any time. You also have the right to stop the survey at any time.

This is designed to help us learn about how people see themselves as a mother, and it will take only about 20 minutes to complete. The survey is divided into several parts including your views about motherhood, your feelings, and background questions on you.

This study poses no known risks to your health. None of the identifying information (name, e-mail addresses, and phone number) is collected. Your responses will not be traced back to you, thus no one will know how you responded. All data will be kept strictly confidential and shall be used only for authorized purposes. If you wish your data to not be used by the researcher, you may choose to do so.

If you experience any distress from answering any of the questions in the survey, professional counseling is available upon request from the Early Childhood Learning & Knowledge Center (ECLKC). You may contact them at 3939 Thirteenth Street, (951) 826-6530, <https://eclkc.ohs.acf.hhs.gov>. We hope this survey will be a good opportunity for you to reflect upon your experience of mothering. By sharing your thoughts and feelings, you will be able to help contribute to a better understanding of the mother role in contemporary society.

The data will be collected through October – December 2017, and more detailed information on the complete scope of this study will be available after all the data has been collected, at which time you may contact Juha Lee (jlee419@ucr.edu), Dr. Jan E. Stets (jan.stets@ucr.edu) or Dr. Esmirna Valencia (evalencia@rcoe.us).

If you have questions about your rights or complaints as a research subject, please contact the IRB Chairperson at (951) 827 - 4802 during business hours, or to contact them by email at irb@ucr.edu. A representative of Office of Research Integrity may review research-related records for quality assurance in order to ensure that relevant laws and guidelines are followed. All information accessed by ORI will be held to the same level of confidentiality that has been stated by the research team.

You may contact the study researcher Juha Lee (jlee419@ucr.edu | 714-309-7757) if you have any questions.

If you agree to participate in this survey, please sign and date below.

Signature: _____

Date: _____

1) The items below ask about **how you are feeling right now**. Please CHECK (✓) a position between each pair of opposite emotions to indicate your current feeling where 1 represents an emotion on the left, 9 reflects an emotion on the right, and 5 is a half-way between the two emotions.

Emotion	1	2	3	4	5	6	7	8	9	Emotion
Happy										Not happy
Not Sad										Sad
Angry										Not angry
Proud										Not proud
Not Depressed										Depressed
Not guilty										Guilty
Fearful										Not fearful

2) What kind of mother are you? Each item consists of a pair of characteristics, with the number 1-7 in between. Each pair describes contradictory characteristics, that is, you cannot be both at the same time. Please CHECK (✓) a position that describes where you fall on the scale.

As a mother, I am...									
	1	2	3	4	5	6	7		
Very selfish								Not selfish	
Very forgiving								Not forgiving	
Not involved with my child(ren)								Very involved with my child(ren)	
Very strong (physically)								Very weak (physically)	
Very weak (mentally)								Very strong (mentally)	
Very immoral								Very moral	
Emotional provider								Not an Emotional provider	
Not a Financial provider								Financial provider	

3) The statements below ask about how important being a mother is to you. Please CHECK (✓) a box that describes how much you agree with each statement.

	Strongly Agree	Agree	Disagree	Strongly Disagree
Being a mother is an important part of how I see myself.				
Being a mother is an important reflection of who I am.				
I have come to think of myself as a mother.				
I have a strong sense of belonging to a community of mothers.				

4) The items below ask about how often you identify yourself as a mother in situations. Please CHECK (✓) a box that describes how certain you are that you would tell this person that you are a mother.

	Almost certainly would not	Probably would not	Probably would	Almost certainly would
Think about meeting a person of the same sex as you for the first time. How certain are you that you would tell this person that you are a mother?				
Think about meeting a friend of a close friend for the first time. How certain are you that you would tell this person that you are a mother?				
Think about meeting a friend of a family member for the first time. How certain are you that you would tell this person that you are a mother?				
Think about meeting a stranger for the first time. How certain are that you would tell this person that you are a mother?				

5) What kind of mother do you **desire** to be? Each item consists of a pair of characteristics, with the number 1-7 in between. Each pair describes contradictory characteristics, that is, you cannot be both at the same time. Please CHECK (✓) a position that describes where you fall on the scale.

As a mother, I desire to be...								
	1	2	3	4	5	6	7	
Very selfish								Not selfish
Very forgiving								Not forgiving
Not involved with my child(ren)								Very involved with my child(ren)

Very strong (physically)								Very weak (physically)
Very weak (mentally)								Very strong (mentally)
Very immoral								Very moral
Emotional provider								Not an Emotional provider
Not a Financial provider								Financial provider

6) The items below ask **how you are feeling now**. Please CHECK (✓) a position between each pair of opposite emotions to indicate your current feeling where 1 represents an emotion on the left, 9 reflects an emotion on the right, and 5 is a half-way between the two emotions.

Emotion	1	2	3	4	5	6	7	8	9	Emotion
Happy										Not happy
Not Sad										Sad
Angry										Not angry
Proud										Not proud
Not Depressed										Depressed
Not guilty										Guilty
Fearful										Not fearful

7) What kind of mother **should** you be? Please CHECK (✓) a position that describes where you fall on the scale.

As a mother, I should be...								
	1	2	3	4	5	6	7	
Very selfish								Not selfish
Very forgiving								Not forgiving
Not involved with my child(ren)								Very involved with my child(ren)
Very strong (physically)								Very weak (physically)
Very weak (mentally)								Very strong (mentally)

Very immoral								Very moral
Emotional provider								Not an Emotional provider
Not a Financial provider								Financial provider

8) The statements below ask about your interactions with others. Please CHECK (✓) a box that indicates the frequency by which you engage in each activity.

	Never	Seldom	Once a month	Less than once a week	Once a week	Several times a week	Daily
How often do you do things with people who also are mothers?							
How often do you do things with people who are not mothers?							

9) Please FILL IN the number of hours you spend with the following people in a week.

a) In an average week, I spend ____ hours doing things with people who also are mothers.

b) In an average week, I spend ____ hours doing things with people who are not mothers.

10) For the next three sets of questions, please think about the people you know. Please CHECK (✓) a box that best reflects your response.

	Miss them not at all	Miss them a little	Miss them somewhat	Miss them a great deal
If you were not able to see them, how much would you miss the people you know who are mothers?				
If you were not able to see them, how much would you miss the people you know who are not mothers?				

	Not close at all	Not very close	Somewhat close	Very close
How close (in personal and emotional terms) are you to the people you know who are mothers?				
How close (in personal and emotional terms) are you to the people you know who are not mothers?				

	Not at all important	Not very important	Somewhat important	Very important
How important to you are the people you know who are mothers?				
How important to you are the people you know who are not mothers?				

11) The items below describe **how you think others you are close to see you as a mother**. Please CHECK (✓) a box that describes where you fall on the scale.

As a mother, others who are close to me see me as...									
	1	2	3	4	5	6	7		
Very selfish								Not selfish	
Very forgiving								Not forgiving	
Not involved with my child(ren)								Very involved with my child(ren)	
Very strong (physically)								Very weak (physically)	
Very weak (mentally)								Very strong (mentally)	
Very immoral								Very moral	
Emotional provider								Not an Emotional provider	
Not a Financial provider								Financial provider	

12) The items below ask about **how you are feeling right now**. Please CHECK (✓) a position between each pair of opposite emotions to indicate your current feeling.

Emotion	1	2	3	4	5	6	7	8	9	Emotion
Happy										Not happy
Not Sad										Sad
Angry										Not angry
Proud										Not proud
Not Depressed										Depressed
Not guilty										Guilty
Fearful										Not fearful

13) Below is a list of statements dealing with your general feelings about yourself. Please CHECK (✓) a box that describes how much you agree with each statement.

	Strongly Disagree	Disagree	Agree	Strongly Agree

On the whole, I am satisfied with myself.				
At times I think I am no good at all.				
I feel that I have a number of good qualities.				
I am able to do things as well as most other people.				
I feel I do not have much to be proud of.				
I certainly feel useless at times.				
I feel that I am a person of worth, at least on an equal plane with others.				
I wish I could have more respect for myself.				
All in all, I am inclined to feel that I am a failure.				
I take a positive attitude toward myself.				

14) Below is a list of statements dealing with how you approach goals, tasks, and challenges. Please CHECK (✓) a box that describes how true your approach is.

	Not at all True	Hardly True	Moderately True	Exactly True
I can always manage to solve difficult problems if I try hard enough.				
If someone opposes me, I can find the means and ways to get what I want.				
It is easy for me to stick to my aims and accomplish my goals.				
I am confident that I could deal efficiently with unexpected events.				
Thanks to my resourcefulness, I know how to handle unforeseen situations.				
I can solve most problems if I invest the necessary effort.				
I can remain calm when facing difficulties because I can rely on my coping abilities.				
When I am confronted with a problem, I can usually find several solutions.				
If I am in trouble, I can usually think of a solution.				
I can usually handle whatever comes my way.				

15) The items below ask you about how you have felt **in the past 2 week**, not just how you feel today. Please CHECK (✓) a box that describes how often you have experienced each of the statements listed.

Over the past 2 weeks , how often have you been bothered by any of the following problems?	Not at all	Several Days	More than Half the Days	Nearly Every Day
Little interest or pleasure in doing things				
Feeling down, depressed or hopeless				
Trouble falling asleep, staying asleep, or sleeping too much				
Feeling tired or having little energy				
Poor appetite or overeating				
Feeling bad about yourself – or that you’re a failure or have let yourself or your family down				
Trouble concentrating on things, such as reading the newspaper or watching television				
Moving or speaking so slowly that other people could have noticed. Or, the opposite – being so fidgety or restless that you have been moving around a lot more than usual				
Thoughts that you would be better off dead or of hurting yourself in some way				

16) If you checked off any problems, how difficult have those problems made it for you to do your work, take care of things at home, or get along with other people? Please CHECK (✓) a box that you agree with the most.

☐ Not difficult at all ☐ Somewhat difficult ☐ Very difficult ☐ Extremely difficult

17) What is your relationship to your child(ren)? Please CHECK (✓) a box.

☐ Biological ☐ Step ☐ Foster ☐ Adoptive

18) How old are you? _____ years

19) What is the highest level of education you have completed? Please CHECK (✓) a box.

- | | |
|--|---|
| <input type="checkbox"/> Less than high school degree | <input type="checkbox"/> Bachelor degree |
| <input type="checkbox"/> High school degree or equivalent (e.g. GED) | <input type="checkbox"/> Associate degree |
| <input type="checkbox"/> Some college but no degree | <input type="checkbox"/> Graduate degree |

20) Which of the following categories best describes your employment? Please CHECK (✓) a box.

- | | |
|---|---|
| <input type="checkbox"/> Full-time | <input type="checkbox"/> Not employed, not looking for work |
| <input type="checkbox"/> Part-time | <input type="checkbox"/> Retired |
| <input type="checkbox"/> Not employed, looking for work | <input type="checkbox"/> Disabled, not able to work |

21) To which racial or ethnic group do you *most* identify? Please CHECK (✓) a box.

- | | |
|--|--|
| <input type="checkbox"/> African-American (non-Hispanic) | <input type="checkbox"/> Asian/Pacific Islanders |
| <input type="checkbox"/> Caucasian (non-Hispanic) | <input type="checkbox"/> Latino or Hispanic |
| <input type="checkbox"/> Native American | <input type="checkbox"/> Other (Specify: |

_____)

22) Which of the following best describes your current relationship status? Please CHECK (✓) a box.

- | | |
|---|--|
| <input type="checkbox"/> Married | <input type="checkbox"/> Widowed |
| <input type="checkbox"/> Divorced | <input type="checkbox"/> Separated |
| <input type="checkbox"/> In a domestic partnership or civil union | <input type="checkbox"/> Single, never married |

23) How many children do you have? _____ child(ren)

24) How old is your youngest child? _____ years

25) What is your religious affiliation? Please CHECK (✓) a box.

- | | | |
|-----------------------------------|------------------------------------|-------------------------------------|
| <input type="checkbox"/> None | <input type="checkbox"/> Christian | <input type="checkbox"/> Protestant |
| <input type="checkbox"/> Catholic | <input type="checkbox"/> Muslim | <input type="checkbox"/> Jewish |
| <input type="checkbox"/> Buddhist | <input type="checkbox"/> Hindu | <input type="checkbox"/> Other |

26) How often do you attend religious service? Please CHECK (✓) a box.

- | | |
|---|--|
| <input type="checkbox"/> Never | <input type="checkbox"/> Less than once a year |
| <input type="checkbox"/> About once a year | <input type="checkbox"/> Several times a year |
| <input type="checkbox"/> About once a month | <input type="checkbox"/> 2-3 times a month |
| <input type="checkbox"/> Nearly every week | <input type="checkbox"/> Several times a week |

A2. Factor Analysis of Maternal Depression (N = 86)

Items	Loading
Pleasure in doing things	.61
Feeling down	.69
Trouble falling asleep	.68
Feeling tired	.49
Poor appetite	.69
Feeling bad about yourself	.86
Trouble concentrating	.80
Moving or speaking slowly	.72
Better off dead	.62
Alpha Reliability	.89

A3. Factor Analysis of Emotions (N = 86)

Items	Loading
Happy	.82
Sad	.80
Angry	.86
Proud	.65
Depressed	.65
Guilty	.43
Fearful	.54
Alpha Reliability	.85

A4. Factor Analysis of the Mother Identity (N = 86)

Items	Loading
Selfish	.36
Forgiving	.62
Involved with my child(ren)	.73
Physically strong	.67
Mentally strong	.65
Moral	.59
Financial provider	.47
Alpha Reliability	.75

A5. Factor Analysis of Prominence of the Mother Identity (N = 86)

Items	Loading
Important part of how I see myself	.87
Important reflection of who I am	.95
Think of myself as a mother	.87
Strong sense of belonging	.51
Alpha reliability	.87

A6. Factor Analysis of Salience of the Mother Identity (N = 86)

Items	Loading
Same sex	.94
A close friend	.93
A friend of a family member	.86
A stranger	.68
Alpha reliability	.91

A7. Factor Analysis of Reflected Appraisals of the Mother Identity (N = 86)

Items	Loading
Selfish	.44
Forgiving	.60
Involved with my child(ren)	.59
Physically strong	.82
Mentally strong	.60
Moral	.76
Financial provider	.45
Alpha reliability	.82